

Application No.: 10/580,727

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Amendments to the claims:

1. (Cancelled)

2. (Cancelled)

3. (Currently Amended) The PNA probe set of claim 25, wherein a target sequence of any one of SEQ ID NO: 6, SEQ ID NO: 7 and SEQ ID NO: 8 ~~the Staphylococcus probe is~~ rRNA, rDNA or a complement of rRNA or rDNA.

4. (Currently Amended) The PNA probe set of claim 25, comprising a nucleobase sequence suitable for the analysis of Staphylococcus epidermidis, said PNA probe being complementary to a target sequence of Staphylococcus epidermidis rRNA or rDNA or its complement.

5. (Currently Amended) The PNA probe set of claim 25, comprising a nucleobase sequence suitable for the analysis of Staphylococcus hominis, said PNA probe being complementary to a target sequence of Staphylococcus hominis rRNA or rDNA or its complement.

6. (Currently Amended) The PNA probe set of claim 25, comprising a nucleobase sequence suitable for the analysis of Staphylococcus haemolyticus, said PNA probe being complementary to a target sequence of Staphylococcus haemolyticus rRNA or rDNA or its complement.

7. (Currently Amended) The PNA probe set of claim 25, comprising a nucleobase sequence suitable for the analysis of Staphylococcus lugdunensis, said PNA probe being complementary to a target sequence of Staphylococcus lugdunensis rRNA or rDNA or its complement.

8. (Currently Amended) The PNA probe set of claim 25, comprising a nucleobase sequence suitable for the analysis of Staphylococcus saprophyticus said PNA probe

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being complementary to a target sequence of *Staphylococcus saprophyticus* rRNA or rDNA or its complement.

9. (Currently Amended) The PNA probe set of claim 25, comprising a nucleobase sequence suitable for the analysis of *Staphylococcus epidermidis* and one or more other *Staphylococcus* species other than *Staphylococcus aureus*, said PNA probe being complementary to a target sequence of *Staphylococcus epidermidis* rRNA or rDNA or its complement

10. (Currently Amended) The PNA probe set of claim 25, comprising a nucleobase sequence suitable for the analysis of *Staphylococcus hominis* and one or more other *Staphylococcus* species other than *Staphylococcus aureus*, said PNA probe being complementary to a target sequence of *Staphylococcus hominis* rRNA or rDNA or its complement.

11. (Currently Amended) The PNA probe set of claim 25, comprising a nucleobase sequence suitable for the analysis of *Staphylococcus haemolyticus* and one or more other *Staphylococcus* species other than *Staphylococcus aureus*, said PNA probe being complementary to a target sequence of *Staphylococcus haemolyticus* rRNA or rDNA or its complement.

12. (Currently Amended) The PNA probe set of claim 25, comprising a nucleobase sequence suitable for the analysis of *Staphylococcus lugdunensis* and one or more other *Staphylococcus* species other than *Staphylococcus aureus*, said PNA probe being complementary to a target sequence of *Staphylococcus lugdunensis* rRNA or rDNA or its complement.

13. (Currently Amended) The PNA probe set of claim 25, comprising a nucleobase sequence suitable for the analysis of *Staphylococcus saprophyticus* and one or more other *Staphylococcus* species other than *Staphylococcus aureus*, said PNA probe being complementary to a target sequence of *Staphylococcus saprophyticus* rRNA or rDNA or its complement.

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14. – 24. (Cancelled)

25. (Currently Amended) A PNA probe set comprising a PNA probes that ~~is~~are at least 86% identical 95% homologous to SEQ ID NO:6, a PNA probe that is at least 95% homologous to SEQ ID NO: 7 and a PNA probe that is at least 95% homologous to SEQ ID NO: 8.

26. (Previously Presented) The PNA probe set of claim 25, wherein the probes are differently labeled for independent analysis of two or more Staphylococcus species.

27. – 29. (Cancelled)

30. (Previously Presented) The PNA probe set of claim 25 further comprising at least one PNA blocking probe for the analysis of one or more Staphylococcus species other than S. aureus.

31. – 50. (Cancelled)

51. (Withdrawn) A kit suitable for performing an assay for analysis of one or more Staphylococcus species other than S. aureus in a sample, wherein said kit comprises:
a) a PNA probe set according to claim 25 ~~1~~–24 and b) other reagents or compositions necessary to perform the assay.

52. (Withdrawn) The kit of claim 51, wherein one or more Staphylococcus species other than S. aureus and at least one other microorganism optionally present in a sample are independently detected, identified and/or quantitated.

53. (Withdrawn) The kit of claim 52, wherein one or more Staphylococcus species other than S. aureus and S. aureus optionally present in a sample are independently detected, identified and/or quantitated.

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54. (Withdrawn) The kit of any one of claims 51-53, wherein one or more *Staphylococcus* species other than *S. aureus* optionally present in a sample is detected, identified and/or quantitated and its susceptibility to antimicrobial agents is determined.

55. (Withdrawn) The kit of any one of claims 51-53, wherein one or more *Staphylococcus* species other than *S. aureus* detected is Coagulase-Negative *Staphylococci*, clinically significant Coagulase-Negative *Staphylococci*, or a subset of clinically significant Coagulase-Negative *Staphylococci*.

56. (Withdrawn) The kit of any one of claims 51-53, wherein the kit is used in an in situ hybridization assay.

57. (Withdrawn) The kit of claim 56, wherein the kit is a fluorescence in situ hybridization assay for simultaneous, independent (multiplex) identification of one more *Staphylococcus* species other than *S. aureus* and of *S. aureus*.

58. (Withdrawn) The kit of any one of claims 51-53, wherein the kit is used for a real-time PCR assay.

59. (Withdrawn) The kit of any one of claims 51-53, wherein the kit is used to examine clinical samples such as clinical specimens or cultures thereof.

60. (Withdrawn) The PNA probe set of claim 25, further comprising at least one PNA probe for the analysis of *S. aureus*.

61. (Withdrawn) The PNA probe set of claim 25, wherein the PNA probes are identical to SEQ ID NO: 6, SEQ ID NO: 7 and SEQ ID NO: 8.

62. (New) The PNA probe set of claim 25, wherein the PNA probes are SEQ ID NO: 6, SEQ ID NO: 7 and SEQ ID NO: 8

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